

EXECUTIVE SUMMARY

The District of Columbia Department of Transportation (DDOT) is conducting a study investigating potential traffic management and truck management improvements in the Friendship Heights area of Northwest Washington, DC in response to citizens' concerns. The Louis Berger Group, Inc. (Consultant), is conducting the study with assistance from DDOT staff. This report refers to the team of Consultant and DDOT staff as the "Study Team."

The main goals of the study are to examine existing and future traffic conditions in the study area and to determine short-term and long-term traffic management and infrastructure improvements to reduce traffic congestion, especially during peak morning and evening travel hours, reduce truck traffic, improve traffic and pedestrian safety, and protect surrounding residential streets from traffic impacts. The Friendship Heights study area is bounded by the following streets:

- Western Avenue (To the north)
- 41st Street (To the east)
- Fessenden Street (To the south)
- 45th Street (To the west)

The study would not have been possible without the assistance of area residents and the Advisory Neighborhood Commission (ANC). The Study Team held meetings with area residents to discuss transportation issues and preliminary improvement options. The area residents provided additional input via email and regular correspondence.

The study was conducted between March, 2003 and November, 2003. This final report includes transportation issues and deficiencies in the transportation infrastructure identified throughout the study and finalized improvement recommendations after considering comments received by residents in the Friendship Heights area. It also provides a summary assessment of future development impacts and the effectiveness of the proposed recommendations in mitigating the impacts of future traffic growth.

The Study Team first met with residents in the Friendship Heights area to identify issues and concerns. Data collection took place between March and July, 2003 to gain and expand an understanding of existing conditions in the Friendship Heights Transportation study area. The quantitative assessment of existing conditions based on collected data was combined with field evaluations throughout the study area during peak and off-peak periods. Quantitative assessment and field evaluation efforts were used to verify transportation issues and concerns raised in the study area and to shape recommended improvements. Following are the main findings of the study:

- The three major travel corridors (principal and minor arterials) in the study area are Wisconsin Avenue, Western Avenue, and Military Road.

Public Transportation

- Washington Metropolitan Area Transit Authority (WMATA) provides rail and bus services in the Friendship Heights area. Ride On Montgomery County transit service also operates a bus service on the Montgomery County side of the Friendship Heights community, which enhances the transit connectivity between the District of Columbia and Montgomery County. There are a total of five Metro entrances and exits: three in the District of Columbia and two in Montgomery County. Six WMATA bus routes and two Ride On routes operate in Friendship Heights, all utilizing Wisconsin Avenue and Western Avenue.
- Based on the 2002 Metrorail Passenger Survey, the majority of the Metrorail patrons, 64 percent, walk to the Friendship Heights station and 14 percent of patrons arrive at the station via WMATA bus or Ride On service in Montgomery County, Maryland.
- Based on observation during the study period, less than 50 percent of the 30 bicycle racks and approximately 7 percent of the 22 lockers provided by WMATA at the Friendship Heights station are utilized.

Traffic Volume and Classification

- Wisconsin Avenue is the highest volume road in the study area, carrying more than 28,000 vehicles per day (vpd). The second highest daily traffic volumes were recorded on Western Avenue with almost 24,000 vpd.
- The morning and afternoon peak-hours were from 7:45 - 8:45AM and from 5:15 - 6:30 PM.
- 43rd Street between Military Road and Jenifer Street is a major cut-through where over 1,400 vehicles (truck and auto, both directions) were recorded during the field observation.
- Auto traffic contributes from 88 percent to 95 percent of all traffic on the recorded streets.
- A significant number of trucks were found to be traveling in the study area. The majority of the trucks, buses, and tractor trailers were found to be traveling along arterial routes such as Wisconsin Avenue, Western Avenue, and Military Road.
- The three arterials, Military Road, Wisconsin Avenue, and Western Avenue had a high volume of light and heavy trucks. The three arterials had similar proportions of heavy trucks at two to three percent of total volume (ranging from 108 to 275 heavy trucks per day). Military Road had the highest proportion of light trucks, from five to six percent of total traffic volume (ranging from 276 to 333 light trucks per day). The light truck category includes FedEx and UPS delivery trucks.

Speed

- Vehicle speeding is not a significant problem in the study area except on River Road, where the mean speed recorded was in excess of 13mph above the posted speed limit. In

the rest of the study area, there are instances of speeding, but it is not an endemic problem due to three main contributing factors: neighborhood environment, steady volume of traffic and narrow lanes.

Queues (Back-ups)

- The most critical queuing occurs along the Military Road approach to 41st Street during the afternoon peak hours. This is the only location in the study area where a significant proportion of the queued vehicles wait through two or more signal cycles before being discharged.

Safety (Accident Summary and Pedestrian Crossings)

- The intersection of Wisconsin Avenue and Jenifer Street had the highest number of incidents, 34 over the past three years, followed by two other Wisconsin Avenue intersections: at Western Avenue (23 incidents) and at Fessenden Street (22 incidents).
- The intersection at Military Road and 42nd Street, which is a minor arterial street intersecting with a local street, had 15 incidents with injuries.
- A high volume of pedestrian activity was observed at three locations: Wisconsin Avenue between Garrison Street and Western Avenue, Western Avenue between Jenifer Street and Wisconsin Circle, and Military Road at its intersection with 43rd Street. This finding is consistent with the significant commercial/retail land uses located along these roadways, as well as the proximity of the Friendship Heights Metrorail station, a major gateway for the Friendship Heights area.
- A total of 219 jay-walking movements were observed during a two-hour midday period along Wisconsin Avenue, between Western Avenue and Jenifer Street.

Parking

Public Parking Garages and Surface Lots

- Parking in most of the facilities appears to be adequate throughout the study area for a fee. Parking utilization appears to be higher at the garage facility with an entrance on Wisconsin Avenue and at facilities closest to office buildings.

On-Street Parking

- Significant commercial/retail land uses on Wisconsin Avenue and the proximity of the Friendship Heights Metrorail station contributes to demand for free and metered on-street parking spaces, particularly on streets adjacent to or parallel to Wisconsin Avenue. On Weekdays and Saturdays, utilization of on-street parking met or exceeded estimated parking capacity for some streets.

Parking Violation

- Consistent with findings for on-street parking utilization, approximately one to two out of three vehicles parked vehicles on 43rd Street, 42nd Place, Jenifer Street, and 42nd Street

between Military Road and Garrison Street violated parking regulations (vehicles parked longer than the permitted 2 hours without “Zone 3 Permit” sticker).

- It was apparent that double and illegal parking of delivery trucks and other vehicles on Wisconsin Avenue and Military Road is a serious contributing factor to longer delays, and threatens pedestrian safety. The rates of violation were less for the local street farther away from the Wisconsin Avenue commercial district.

Existing Conditions

- Several intersections in the study area are operating at undesirable levels of service (LOS), E and F, during the morning and afternoon peak hours. The signalized intersections operating with the longest delays are Military Road/41st Street and Military Road/Reno Road in the afternoon peak hour.
- At an unsignalized intersection of Wisconsin Avenue/Garrison Street, an average delay for the minor street during the morning peak hours was almost 3 minutes.

Future Conditions

- Without improvements, background traffic growth and new development proposals will further deteriorate traffic conditions in the study area.
- Some of the intersections are currently operating at acceptable levels of service; however, without significant improvements, LOS at Western Avenue/41st Street and Wisconsin Avenue/Jenifer Street will deteriorate to E or F.
- Implementation of the recommended mitigation measures is essential to the continued growth and prosperity of the Friendship Heights community. The proposed improvements will improve LOS to C or better at all signalized intersections examined in the study.

The Study Team met with area residents and compiled a comprehensive list of transportation issues for the study area, followed by extensive data collection, field investigations, and assessments of existing conditions. These issues are summarized in Exhibit E1. The Study Team then developed improvement recommendations which incorporate or consider public comments and suggestions. Exhibits E2 through E4 show the recommendations to improve safety and transportation operations in the study area. The recommendations in this study are mainly intended to address needs of improved traffic and pedestrian safety in the Friendship Heights area and reduce the amount of cut-through traffic on residential streets. However, if the recommended measures do not improve traffic and pedestrian safety and do not reduce cut-through traffic on residential streets, DDOT will revisit the residential streets and implement additional traffic calming measures where necessary.

Recommendations of both short-term improvements (within 12 months) and long-term improvements (over 12 months) must still go through an appropriate DDOT process; specific projects, if approved, will be implemented based on available capital funds.

Exhibit E1: Transportation Issues

Exhibit E2: Transportation Recommendations – Intersections

Exhibit E3: Transportation Recommendations – Major Roadways, Pedestrian Safety, and Parking

Exhibit E4: Transportation Recommendations -- Sign